



Nigeria Shipbuilding & Maritime Solutions

Ship Design
Ship Building
Ship Maintenance & Repair
Equipment Supply
Import & Export

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General Outline

ShipMultiVision Nig. Ltd. has been formed in conjunction with the AluminumNow Group with strong and established infrastructure in manufacturing and support to the security and oil & gas sectors in Nigeria

To Whom it may Concern

The AluminumNow Group has been active in activities to bring a major shipyard development to Nigeria with access to designs, international shipyards and training which will assist in a step by step development based on orders. AluminumNow does not own shipyards however after many years in the maritime sector is in the position to provide designs, technological transfer and management and major shipyard support to such a development.

This is not a case of a internationally based shipyard wishing to invest in Nigeria but a desire to develop business in Nigeria to meet Nigerian and West African requirements through a Nigerian Company majority owned by Nigerians.

Developing a shipyard complex should incorporate the extensive ability to provide repair and maintenance to existing boats and ships in Nigeria and West Africa as well as full back up to new builds by offering a long term maintenance program.

The Logistics of such a project are not difficult as long as there is strong Nigerian support on every level.

The need of ship repair and maintenance is very evident and it is clear that new builds can be carried out in Nigeria at competitive costs with an progressive infrastructure being developed that allows for multi-shifts to allow for delivery to meet requirements and maximum return of a shipyard development on a step by step basis based on orders/

Areas of discussion and known requirements include repair and maintenance services, and new builds including current discussions of:-

- ✦ Patrol Boats
- ✦ FVIS
- ✦ Pilot Boats
- ✦ PSV
- ✦ AHT/AHTS
- ✦ Tugs
- ✦ Green Tugs
- ✦ Barges
- ✦ Self-propelled barges
- ✦ Ferries
- ✦ Hovercraft
- ✦ Hoverflight
- ✦ Custom Designs

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Equipment supply and conversions:-

- ✚ Diesel/Electric & LNG Electric Drive Systems
- ✚ Seafury Service Drives
- ✚ Hamilton Waterjets
- ✚ Doosan Power Systems
- ✚ Power unit solutions
- ✚ Generators – LNG Powered

Other services include:-

- ✚ Ballistic Protection water and land based solutions.
- ✚ Maritime Related Products
- ✚ Power Generation Systems

- 1) The intent is to provide a shipyard with the eventual capability of producing vessels as the market demands, up to 60,000 DWT and this is to be achieved through incremental phases involving site development, investment, need and Nigerian personnel training in both ship construction, planning and management.
- 2) To achieve this tonnage will require a land mass in of the region of 150,000m(15 hectares) as well as good “deep” water access and an eventual work force of +/- 2,000 workers.

The most important and critical part of this development will be the training to ensure all personnel are familiar with the latest technical advancement in shipbuilding and safety procedures.

To achieve this training in an efficient way it is the intention to utilize our UK Shipyard to provide on training in the UK and onsite training in Nigeria. This a cross exchange of technologies is an ideal way to resolve the Nigerian shipyard training efficiently.

- 3) The efficiency of vessel construction is based on several factors, speed of construction, land size to carry on several aspects of the same and multiple projects simultaneously, the machinery necessary for production in the form of cranes, sheet bending, welding and forming equipment as well as a launching / hauling capability and above all an experienced, trained and capable workforce in the way of actual constructors, planning engineers, engineers, project managers, naval architects and management – the AluminumNow solution is to combine both Nigerians & British work force to speed construction and educate the Nigerian work force at the same time, the phases would be:-

3a) All designs to be to class or MCA as appropriate. Full ship in a box format to be utilized using our shipyard in the UK and/or Turkey (Vessels over 50m) with full assembly in Nigeria.

Advantages:-

- Speed of construction so the client receives the vessel in a timely manner built by a recognized and experienced builder
- Trouble shooting and resolution, this is much easier and faster by an experienced builder with good faculties and supply. Unfortunately vessels are seldom built totally to the drawings as things that may have appeared possible in 2D (two dimensions on a drawing board / CAD) are not always possible at full scale. Some areas of construction may not meet class rules and will require changes. Some machinery / equipment may not be available on the world market to satisfy the proposed delivery date and structural changes may be required to suit the equipment available and these all requires experience to resolve quickly and not slow or stop production. While Full Kits are being prepared Nigerians will be on site in the country concerned for training in methods and execution and Class approval in welding, construction protocols, etc. while the construction is in progress.

3b)Once the initial vessels are designed all changes in production and specification will be incorporated into the production drawings, build schedule, machinery and equipment list will be revised and a “kit” for each vessel will be produced including all required CNC (Computer Numeric Control) cut steel and aluminium parts and sections, interiors, electrics, electronics, piping, power systems etc. to build each vessel at the Nigerian shipyard. AluminumNow will supply construction



leaders, department heads, planning engineers to work alongside their Nigerian counterparts so as to advise and train them in modern shipbuilding practices and assist in Nigerian development and production techniques

3c)As the Nigerian workforce becomes more trained, experienced and capable in the many facets of ship and vessel construction elements of the foreign labour would be withdrawn as possible and over time this would lead to a total Nigerian operation as the nations abilities developed. At the same time we can provide specialists in many fields who could be on call to resolve unusual or specialized problems in new construction and repair.

3d) Welding procedure and welder approval documentation will be developed and witnessed by ourselves, to comply with Department of Trade and Industry (DTI) and Pressure Equipment Directive (PED) requirements, or in liaison with any classification society, e.g. Lloyds, Det Norske Veritas.

Independent testing of welds and welders to meet the following standards:

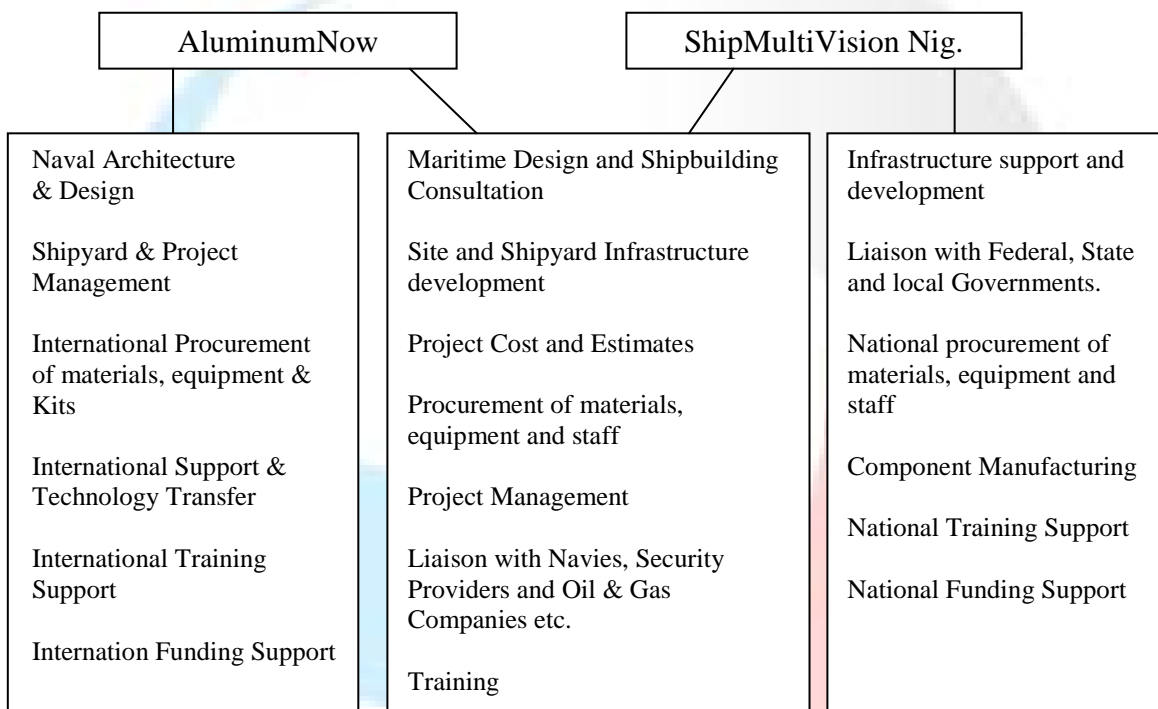
- BS 4872** Minimum Requirement for Welder Competence
- BS EN ISO 15614** Welding Procedure Testing
- BS EN 287** Welder Qualification Testing
- BS EN ISO 9606** Welder Qualification Testing
- ASME IX** Welding Performance and Procedure Testing
- CAA** Welder approval for the Civil Aviation Authority

- 4)** By implementing the processes of our Nigeria Shipyard prospectus it will be possible to start Nigeria's ship building program with a capable world class modern shipyard capable of producing patrol boats, pilot boats, tug boats, tankers, LNG carriers, barges, ferry's, etc. in various materials such as steel, aluminium and composites as well as utilizing various propulsion and drive systems
- 5)** Nigerian involvement is **key**; the plan is to develop a yard that serves the Nigerian need for vessels of all types and has a Nigerian identity through investment by private and governmental systems, labor and management. Even though in the beginning there will be foreign presence for the purpose of training and technology transfer, as the Nigerian workforce gains experience and training Nigerians will assume all responsibilities.
- 6)** AluminumNow will provide designs, Naval Architects and project management, equipment supply, monitor development, , quality control, Nigerian, training and technology transfer programs.
- 7)** At this time:-
 - a) A new Nigerian company to be formed with majority Nigerian Ownership.
 - b) Nigerian technicians to be interviewed to source those suitable for training and qualification to international standards in the following areas(But not limited to):-
 - ✚ Steel Welders
 - ✚ Aluminum Welders
 - ✚ Composite design and lamination
 - ✚ Pipefitters
 - ✚ Electricians
 - ✚ Electronics
 - ✚ Engineering
 - ✚ Component fabrication
 - ✚ Carpenters
 - ✚ Furnishings
 - ✚ Naval Architecture

8) Summary

- a. To offer full design, build management, material procurement and training programs.
- b. To establish a Nigerian Build site for Patrol, crew, pilot, fire, SAR vessels, ferries, offshore vessels and barges etc. thru the services of accredited Naval Architect with whom AluminumNow has established relationships.
- c. To establish a shipyard to build tugs, offshore vessels, workboats and ferries in steel, aluminum and composite for the Nigerian & International clients.
- d. To promote Greenline designs utilizing electric drive systems and alternate fuel systems.
- e. To utilize experienced local shipbuilders, shipwrights, engineers, management and certified personal from Nigeria and to promote training of personnel from the local community.
- f. To utilize existing maritime companies in shipbuilding projects.
- g. To create a training facility to train on site and to provide training in all trades and ship operations in Nigeria and the UK.
- h. To establish a design office with the shipyard complex.
- i. To create a Nigerian Shipyard for Nigerians.

9) Suggested Company Structure and Responsibilities.



For further details and details of the development plans, consultation on designs and new build options and last but not least maintenance and repair please feel free to contact the undersigned at newbuilds@nigerishipbuilding.com

Yours truly

Richard Naylor
 Director
 For and on the behalf of ShipMultiVision Nig Ltd. & the AluminumNow Group(AluminumNow Ltd)

